

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004429**Date Inspected:** 15-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Wu Ming Kai			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** Tower & OBG**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 1:

The QA Inspector randomly observed 1 magnetic drill operator and 2 drill press operators drilling bolt holes in U-Rib connection plates.

The QA Inspector randomly observed 2 magnetic drill operators drilling bolt holes in U-Ribs prior to forming.

OBG Bay 2:

The QA Inspector randomly observed that no contract work was being performed in Bay 2.

OBG Bay 3:

The QA Inspector randomly observed ZPMC welder Jiang Jing Teng ID 046830, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2112, to tack weld T-Ribs to Side Plate SP481-001 WJ's 027/028. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The weld parameters appeared to comply

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with contract requirements.

The QA Inspector randomly observed ZPMC welders Xu Guo Yin ID 059443/Juang Shuang Chen ID 211788 (WJ's 001/002) and Zhang Shao Hui ID 059403/Xiang Jie ID 059378 (WJ's 005/006), utilizing the Submerged Arc Welding (SAW) Process in the 2G/2F (Horizontal Groove/Fillet) Positions with ZPMC WPS WPS-B-P-2342-U1(U-Rib)-4, to weld U-Ribs to Deck Plate DP310-001. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Sun Wei, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 680/682 amps, 25.3/25.1 volts (WJ's 001/002) and 677/689 amps, 24.9/24.6 volts with a travel speed of 510 millimeters (mm) per minute for all welders. The weld parameters appeared to comply with contract requirements.

OBG Bay 4:

The QA Inspector performed a final 10% random Magnetic Particle Testing (MT) verification of the fillet welds on Side Plates SP404-001 (SP404A/Green Tag 001039) WJ's 001-015, and 028-038, SP128-001 (SP128A/Green Tag 001038) WJ's 013-024, Bottom Plate BP119-001 (BP119A/Green Tag 001039) WJ's 007-018 and BP092-001 (BP92A/Green Tag 001037) WJ's 007-018. There appeared to be no indications and the QA Inspector accepted the above listed welds. Green Tag Documentation was signed and dated by ZPMC Representative Wu Ming Kai, ABF Representative Hu Gui Hua and CT QA Inspector Lot Number B75. The attached photo provides additional detail.

OBG Bay 7:

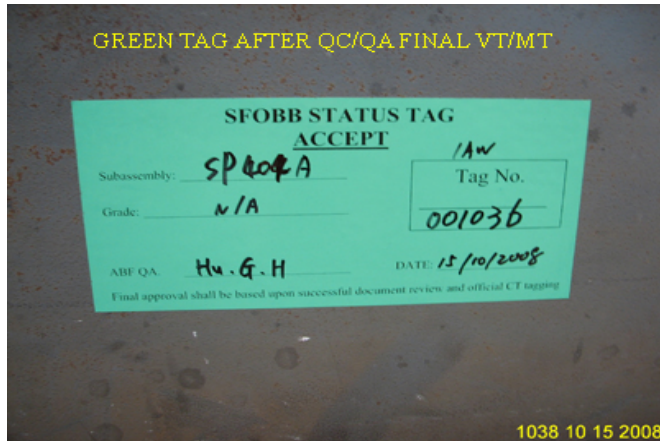
The QA Inspector randomly observed ZPMC welder Liu Kai Ge ID 044830, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2231, to weld the Flange to the Web on Floor Beam Diaphragm FB003-059 at WJ 002. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Huang Wen Pang, monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

OBG Bay 8:

The QA Inspector randomly observed ZPMC welders Jiang Yong Sheng ID 045240 and Lv Feng Bao ID 045175, utilizing the FCAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-T-2132-3, to weld stiffeners to Floor Beam Sub-Assembly FB053-001 at WJ 026. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Hu Wei Qing, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

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Summary of Conversations:

As noted in the above body of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 13764710411, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer
